

BLANK PAGE

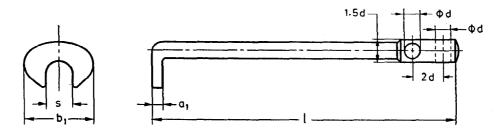


Indian Standard

SPECIFICATION FOR CROWFOOT SPANNERS

1. Scope — Covers the dimensions and requirements of crowfoot spanners of torque series C and D of IS:6131-1980 'Technical requirements of hand operated wrenches (spanners) and sockets (first revision)'.

2. Dimensions



Nominal	Thickness	Width of Head	Hole Dia	Length
Width Across	a 1	b ₁	ď	/
Flats s	Min	Max	Min	≈
13		34		400
14	5.5	36	8	160
16		41	8	
17	6	43	10	200
18		45	10	
19	-	47	40	200
21	7	51	12	200
22	8	53	12	200
24	9	57		
27	10	64	14	
30	11	70		2 50
32	12	74	16	
34	13	78		_
36	13	83	40	
41	14	93	18	315
46	15	104	20	310
50	16	112	20	
55	17	123	25	400

- **2.1** The tolerances on the width across flats dimensions (s) shall be in accordance with IS:2027-1980 'Width across flats for spanners and sockets ($second\ revision$)' as specified for forged and subsequently machined spanners.
- 3. Tommy Bar The spanners shall be provided with two holes suitable for tommy bars conforming to 15:6002-1971 'Tommy bar for box spanners'.

Adopted 2 January 1987

@ May 1987, BIS

Gr 1

IS: 11848 - 1987

- 3.1 The tommy bars shall be a separate item and shall be supplied with the spanner if specifically ordered.
- **4.** Material Suitable alloyed or carbon steel which after heat treatment, fulfil the requirements of hardness and torque tests specified at **5** and **7**. One of the suitable alloy steel for torque series C wrenches is T50 Cr 4V2 as specified in IS:3749-1978 'Tool and die steel for cold work (*first revision*)' and for torque series D wrenches carbon steels are 35C4 and 40C5 as specified in IS:1570 (Part 2)-1979 'Carbon steels (*unalloyed steel*) (*first revision*)'.
- 5. Hardness Spanners shall be hardened throughout and the hardness measured at any point on the spanner shall be within the limits specified in IS: 6131-1980.
- 6. Designation The spanners shall be designated by commonly used name, torque series, nominal width across flats and number of this standard.

Example: A crowfoot spanner of torque series C, with nominal width across flats as 30 mm shall be designated as:

Crowfoot Spanner C 30 IS: 11848

- 7. Workmanship and Finish, Sampling, Torque Testing and Preservation and Packing Shall be in accordance with IS: 6131-1980. Test torque values shall conform to series C if made of alloy steel and series D if made of carbon steel as specified in IS: 6131-1980.
- 8. Marking Spanners shall be legibly stamped with the nominal width across flats near the spanner working ends and manufacturer's name, initials or registered trade-mark on the body.
- 8.1 Certification Marking Details available with the Bureau of Indian Standards.

EXPLANATORY NOTE

These type of spanners are used for assembling of those nuts and bolts which are inaccessible and the movement of ordinary spanners is not possible. Common uses of these spanners are in automobiles. While preparing this specification, considerable assistance has been taken from the catalogues of the manufacturers of this product.

Widths of head specified here are in alignment with ISO 3318-1982 'Assembly tools for screw and nuts open and double head engineer's wrenches, double head box wrenches and combination wrenches—Maximum width of heads, issued by the International Organization for Standardization (ISO).